

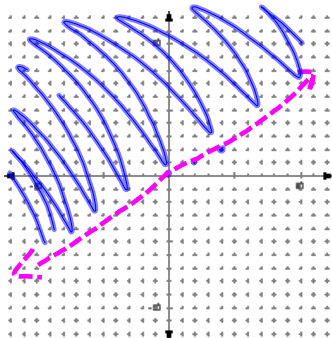
2-7 Graphing Inequalities

Example 1

$$2y > x$$

$$y > \frac{1}{2}x$$

Test point (0,10)
 $20 > 0$ ✓



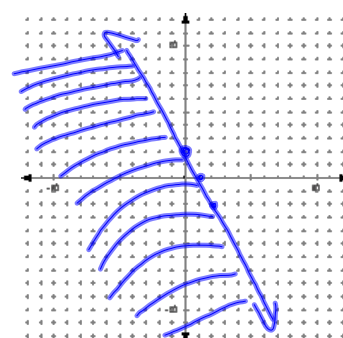
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Example 2

$$4x + 2y \leq 4$$

$$2y \leq -4x + 4$$

$$y \leq -2x + 2$$



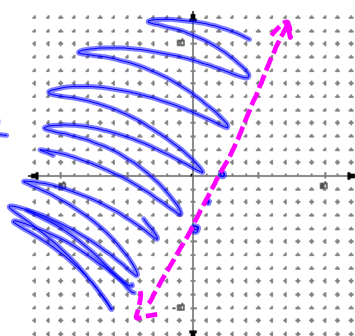
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Example 3

$$6x - 3y < 12$$

$$-3y < -6x + 12$$

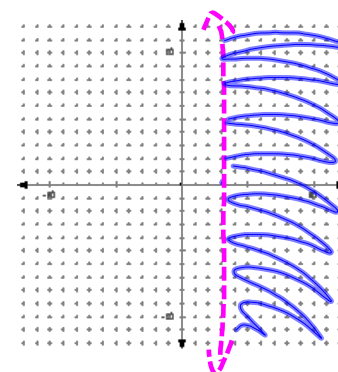
$$y > 2x - 4$$



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Example 4

$$x > 3$$



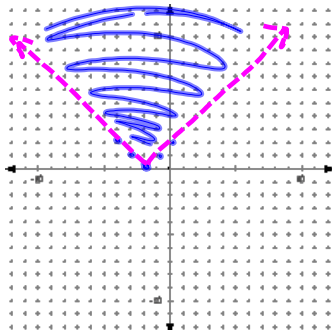
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Absolute Value

Example

$$y > |x + 2|$$

$$V(-2, 0)$$

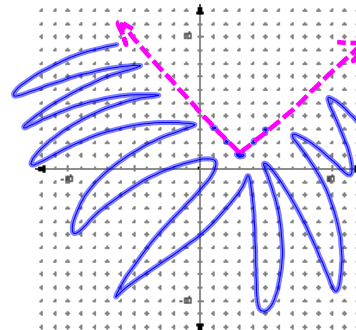


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Example

$$y < |x - 3| + 1$$

$$V(3, 1)$$

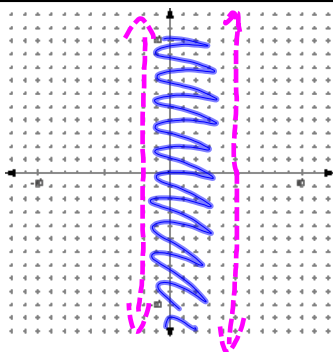


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Example

$$-2 < x < 5$$

$$\begin{array}{l} -2 < x \\ \text{AND} \\ x < 5 \end{array}$$



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SHOPPING For Exercises 10–12, use the following information.
Gwen wants to buy some cassettes that cost \$10 each and some CDs that cost \$13 each. She has \$40 to spend.

10. Write an inequality to represent the situation, where c is the number of cassettes she buys and d is the number of CDs.

11. Graph the inequality.

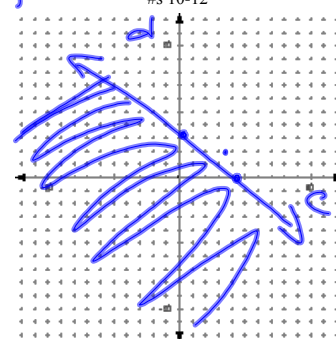
12. Can she buy 3 cassettes and 2 CDs? Explain.

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#s 10-12

$$10c + 13d \leq 40$$

$$(0, 3\frac{1}{3})$$

$$(4, 0)$$



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HW

p 98 14, 16, 20, 23, 24, 26-28, 35-37

Graph Paper

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